

REMARKS

Claims 1-24 remain in the application. Claims 1,3,5-7 and 16-20 stand allowed. Claims 2, 4, 8-15 and 21-24 stand rejected by the Board of Appeals under 35 USC 112, second paragraph, as failing to particularly point out and distinctly claim the invention.

The invention disclosed in this application involves the manipulation of the hole area in at least some portion screen that is spaced above the tip plate in a fiberizing bushing. The purpose of the manipulation of the hole area is to address various problems, or needs, to improve the usefulness and productivity of bushings. The manipulation of the hole area can be in one or more portions of the screen or over almost the entire area of the screen depending upon what problem or need is being addressed.

Claims 2, 4, 8-15 and 21-24 stand rejected by the Board of Appeals under 35 USC 112, second paragraph, as failing to particularly point out and distinctly claim the invention for several reasons, the first reason being the lack of antecedent basis for the following terms:

Claim 2, last line, "the channel",
 Claim 21, line 7, "said bushing",
 line 9, "the hole area", and
 line 10, "said channel".

The claims have been amended to remove the issue of lack of antecedent basis.

Claims 21 and 22 stand rejected by the Board of Appeals under 35 USC 112, second paragraph, as failing to particularly point out and distinctly claim the invention, the Board stating that these claims fail to set forth any discernible steps involved in the claimed processes. Claim 21 has been amended to add the discernable method step included in allowed claim 16.

Claims 23 and 24 stand rejected by the Board of Appeals under 35 USC 112, second paragraph, as failing to particularly point out and distinctly claim the invention, the Board stating that these claims are in the Jepson format but that they are indefinite because it is unclear what steps are included in the admitted prior art method. The Board also objected to the term "and/or" stating "thereby rendering the scope and meaning of the claims unclear."

The mere use of the term "and/or" does not render the claims unclear, but rather what follows the terms "and/or" may not have been clear because it is the "hole, open, area" that is being varied by changing the "hole diameter and/or hole density". Claim 23 has been amended to add the most pertinent steps in the preamble of the claim, "transporting a molten material in a channel to bushing legs and by flowing the molten material through fiberizing bushings mounted in positions closest to the channel". Support for this amendment can be found in the specification from page 8, last partial paragraph through page 9, line 12 of the last partial paragraph. Claim 23 has been further amended to replace "hole diameter and/or hole density" with "hole area per unit area of screen" as, was used in claim 2 (basis in page 2, first full paragraph, to clarify the claim and remove any ambiguity that to which the Board objected. Note that the last phrase of Claim 23, "such that the resistance to flow of the molten material through the central portion of the second screen is greater than the resistance to flow through the two end portions of the second screen" further defines how the hole area in the different portions of the screen varies. Three ways of changing the hole area per unit area of the screen in each portion of the screen are to change the diameter of the holes, the density of the holes, i.e. the number of holes per unit area, or both the diameter of the holes and the hole density, i.e. hole diameter and/or hole density.

The Board also said that the claims are further indefinite in that they use the relative term "closest to the channel" (claim 2, last line, and claim 21, line 10) when the term "the channel" was not previously defined, thereby failing to provide a basis for comparison. The term "channel" is defined in the specification in Fig. 1, item 4, and in the specification at page 7, first full paragraph, page 8, last partial paragraph, lines 4-8, page 9, last paragraph, lines 1-12. The term "channel positions" is described in the specification on page 9, last paragraph, lines 10-12. Claim 2 is for a fiberizing bushing and therefore the relationship to a channel is not relevant until the bushing is installed. The specification teaches how to orient bushings of the type described by claim 2 to get the desired results when they are installed, e.g. see Figs. 6 and the paragraph spanning pages 12-13 and Fig. 8 and the paragraph spanning pages 15-16.

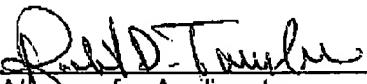
Claim 21 has been amended to include one or more channels in the multi-bushing operation and to provide antecedent basis for the for the word "channel" and "channel" positions. Basis for this amendment can be found in Fig. 1, item 4, and in the specification at page 7, first full paragraph, page 8, last partial paragraph, lines 4-8, page 9, last paragraph. Applicant's attorney believes that claims 2 and 21 now meet all of the requirements of 35 USC 112.

A few other amendments to the claims have been made to correct spelling, correct grammar and to provide consistent antecedent basis such as correcting the spelling of "percentage" in claims 5-7. Also, in some places the word "plate" had been inadvertently omitted following the word "tip", e.g. see amended claim 16, and this omission has been corrected.

The Examiner's attention is directed to U. S. Patent No. 5,935,291, issued August 10, 1999, while the present application was on appeal, and to the fact that the filing date of the present application is prior to the filing date of this patent. This patent is not prior art to the inventions disclosed in the present application.

Applicant's attorney believes that the above amended claims address all of the Board of Appeals' bases for rejection and are now in condition for allowance. If the Examiner believes that still further changes are needed, applicant's attorney requests a telephone interview and respectfully requests the Examiner to call the number below to arrange a time suitable to the Examiner. Thank you.

Respectfully submitted,



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